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**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF OREGON  
PORTLAND DIVISION**

**NORTHWEST ENVIRONMENTAL  
DEFENSE CENTER, WILDEARTH  
GUARDIANS, and NATIVE FISH  
SOCIETY,**

**Case No.**

Plaintiffs,

**COMPLAINT**

v.

**U.S. ARMY CORPS OF ENGINEERS  
and NATIONAL MARINE  
FISHERIES SERVICE,**

Defendants,

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## INTRODUCTION

1. Plaintiffs Northwest Environmental Defense Center, WildEarth Guardians, and Native Fish Society challenge the U.S. Army Corps of Engineers' ("the Corps") continuing operation and maintenance of the Willamette River Basin Flood Control Project ("Willamette Project") for violating the Endangered Species Act ("ESA") due to adverse impacts on threatened Upper Willamette River Chinook salmon and steelhead. The Willamette Project's dams and reservoirs cause significant harm to these imperiled fish by blocking hundreds of miles of spawning habitat in the Upper Willamette River basin and degrading water quality and habitat downstream of the dams. The National Marine Fisheries Service ("NMFS") issued a biological opinion in 2008 that directed the Corps to take various actions to reduce impacts of the Willamette Project to avoid jeopardizing the continued existence of these species, but the Corps has failed to implement many of these actions. In light of these failures and the resulting harm that has occurred and will continue to occur to these fish, the Corps and NMFS must reinitiate ESA consultation and take action to protect these salmonids from extinction.

2. The Willamette Project includes thirteen dams on various tributaries of the Upper Willamette River, but the primary impacts to Upper Willamette River Chinook salmon and steelhead occur due to dams in the Middle Fork Willamette, North Santiam, South Santiam, and McKenzie Rivers sub-basins. These dams are the primary cause of the catastrophic decline of Upper Willamette River Chinook salmon and steelhead, which were listed as threatened species in 1999. The dams block fish passage to and from extensive spawning habitat in the upper reaches of these sub-basins. They also alter natural water flows and water temperatures and prevent downstream movement of sediment and large woody debris that are important components of fish habitat, degrading habitat below the dams in the tributaries and the entire

length of the mainstem Willamette River. The Corps funds five fish hatcheries in an attempt to mitigate the impacts of the dams, but these hatcheries cause their own problems by introducing less-fit hatchery Chinook salmon and steelhead into these rivers, which compete with the stronger wild fish and dilute the wild genes of the species.

3. Upper Willamette River Chinook and steelhead populations collapsed after construction of the Willamette Project, and these species are at high risk of extinction. Instead of improving after release of the 2008 biological opinion, these species have continued to struggle and populations remain far below viable sizes, with some declining further. Counts of wild Chinook and wild winter steelhead making it past Willamette Falls to the Upper Willamette River remain very low, with 2017 being the poorest year on record for Upper Willamette River steelhead.

4. The 2008 biological opinion concluded that the Corps' continued operation of the Willamette Project would jeopardize the existence of both Upper Willamette River Chinook and steelhead and adversely modify their ESA-designated critical habitat. To avoid this result, the biological opinion included a Reasonable and Prudent Alternative that set forth numerous requirements the Corps must implement over the course of the fifteen-year biological opinion. NMFS assumed that these requirements would be met and therefore would significantly alleviate the harm to the fish and their critical habitat. This assumption was the foundation for NMFS' conclusion that the Reasonable and Prudent Alternative would avoid jeopardizing the survival of the two species and allow for progress toward their recovery.

5. This assumption proved wrong. The Corps has failed to fully and properly implement many of the Reasonable and Prudent Alternative measures. Most importantly, the Corps admits it will not achieve juvenile fish passage at the three dams that were required to

have it by the end of the fifteen-year term, the most critical of the measures included in the Reasonable and Prudent Alternative. The Corps also has failed to implement measures to address problems with water temperature and dissolved gas levels, and consistently fails to meet water flow objectives. While the Corps has implemented some of the Reasonable and Prudent Alternative measures, the significant improvements to juvenile fish passage and fish habitat required and expected by the biological opinion are not occurring, preventing significant improvement in survival and recovery of Upper Willamette River Chinook and steelhead.

6. New information has emerged since the 2008 biological opinion that demonstrates additional harm is occurring to these species. Recent status reviews and fish counts document declining populations; climate change impacts are increasing water temperatures even more; studies show high mortality of pre-spawn adult Upper Willamette River Chinook in the Willamette River and its tributaries; and sea lion numbers at Willamette Falls have increased dramatically, causing significant levels of predation on Upper Willamette River Chinook and steelhead.

7. In light of these changed circumstances and new information since the 2008 biological opinion, the Corps and NMFS must reinitiate consultation under the ESA. In addition, the Corps is violating the ESA by continuing to operate the Willamette Project in a way that jeopardizes the continued existence of Upper Willamette River Chinook and steelhead, adversely modifies their critical habitat, and causes unlawful “take” of both species.

### **JURISDICTION AND VENUE**

8. Jurisdiction is proper in this Court pursuant to the ESA citizen suit provision, 16 U.S.C. § 1540(g), because this action seeks to enjoin Defendants from further violations of the Act and regulations promulgated thereunder. Jurisdiction is also proper under 28 U.S.C. § 1331

because this action arises under the laws of the United States, including the ESA, 16 U.S.C. § 1531 *et seq.*, the Administrative Procedure Act (“APA”), 5 U.S.C. § 701 *et seq.*, the Declaratory Judgment Act, 28 U.S.C. § 2201 *et seq.*, and the Equal Access to Justice Act, 28 U.S.C. § 2214 *et seq.* An actual, justiciable controversy exists between the parties, and the requested relief is therefore proper under 16 U.S.C. § 1540(g), 5 U.S.C. §§ 701-06, and 28 U.S.C. §§ 2201-02.

9. Venue is proper in this Court under 16 U.S.C. § 1540(g)(3)(A) and 28 U.S.C. § 1391 because the violations and the resources at issue occur in this judicial district, and at least one Plaintiff resides in this district. Venue is proper in the Portland Division of this district because the reinitiation of consultation would occur in this division, a substantial portion of the lands and resources at issue occur in this division, and all three Plaintiffs and both Defendants have offices in this division.

10. The federal government waived sovereign immunity in this action pursuant to 16 U.S.C. § 1540(g)(1) and 5 U.S.C. § 702.

11. As required by the ESA, Plaintiffs provided the Corps notice of their intent to bring this action more than 60 days prior to filing this lawsuit.

## **PARTIES**

12. Plaintiff NORTHWEST ENVIRONMENTAL DEFENSE CENTER (“NEDC”) is a nonprofit environmental organization based in Portland, Oregon, and its members include attorneys, law students, and members of the public. NEDC’s mission is to preserve and protect the natural environment in the Pacific Northwest by identifying legal and policy solutions to address threats to natural resources. NEDC and its members have specific interests in the continued health of native Pacific salmon species and their habitats.

13. Plaintiff WILDEARTH GUARDIANS is a nonprofit conservation organization

with offices in Oregon and six other western states. WildEarth Guardians has more than 184,000 members and supporters across the United States and works to protect and restore wildlife, wild places, wild rivers, and the health of the American West. WildEarth Guardians and its members have specific interests in the continued health of native Pacific salmon species and their habitats.

14. Plaintiff NATIVE FISH SOCIETY is the leading science-based native fish conservation organization working in the Pacific Northwest, with over 3,700 members and supporters and 87 River Stewards. Guided by the best available science, Native Fish Society advocates for the recovery and protection of wild, native fish and promotes the stewardship of the habitats that sustain them. Native Fish Society and its members have specific interests in the continued health of native Pacific salmon species and their habitats.

15. Plaintiffs, and their staff and members, have deep and long-standing interests in the preservation and protection of Pacific salmon and steelhead, which interests are directly harmed by Defendants' actions and inactions challenged herein. Plaintiffs' staff and members regularly use and enjoy the Willamette River and its tributaries, including the area affected by the Willamette Project, in order to fish for, observe, photograph, study, and enjoy salmon and steelhead and to engage in other personal, recreational, and professional activities. Plaintiffs and their members derive recreational, scientific, aesthetic, spiritual, and economic benefits from these pursuits and the existence in the wild of native salmon and steelhead. Plaintiffs will continue to use the Willamette River and its tributaries in 2018 and beyond for these purposes, and their enjoyment and commercial success will continue to be harmed if the Upper Willamette River Chinook salmon and steelhead populations remain at low numbers due to the effects of the Willamette Project.

16. Plaintiffs have been long-time advocates for Pacific salmon and steelhead,

including Upper Willamette River Chinook salmon and steelhead, and have long-standing concerns about the threat to these species from operation of the Willamette Project. Plaintiffs have engaged in public outreach and education, advocacy with agencies, agency administrative processes, and litigation to promote the protection of Upper Willamette River Chinook salmon and steelhead. For instance, NEDC was a plaintiff in the lawsuit that forced completion of the 2008 biological opinion for the Willamette Project; Native Fish Society has multiple River Stewards that advocate for native fish in the Upper Willamette River basin; and Guardians works to improve water quality and native fish populations through in-stream and upland restoration in national forests around the Pacific Northwest—including the Willamette National Forest, whose streams are the headwaters of the Willamette River.

17. Plaintiffs' interests in protecting and enjoying Upper Willamette River Chinook salmon and steelhead are being directly harmed by Defendants' actions and inactions. Plaintiffs' above-described interests have been, are being, and unless the relief prayed for is granted, will continue to be adversely affected and irreparably injured by Defendants' violations of law.

18. Defendant U.S. ARMY CORPS OF ENGINEERS is an agency or instrumentality of the United States, under the U.S. Department of Army and the Department of Defense, and owns, operates, and maintains the Willamette Project. The Corps maintains an office in Portland, Oregon that serves as the headquarters of the Northwest Division, which includes the Portland District and four other districts in the United States. The Portland District of the Corps is responsible for ESA consultation over the Willamette Project.

19. Defendant NATIONAL MARINE FISHERIES SERVICE is an agency or instrumentality of the United States, under the U.S. Department of Commerce, and is responsible for administering the provisions of the ESA with regard to threatened and endangered marine

species, including threatened Upper Willamette River Chinook salmon and steelhead. The Portland office of NMFS is responsible for ESA consultation over the Willamette Project.

## **STATEMENT OF LAW**

### Endangered Species Act

20. The ESA was enacted to “provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved [and] to provide a program for the conservation of such [] species.” 16 U.S.C. § 1532(b).

21. U.S. Fish and Wildlife Service or National Marine Fisheries Service (“Services”) must list a species as endangered under the ESA if it is in danger of going extinct throughout all or a significant portion of its range, and must list it as threatened if it is likely to become endangered in the foreseeable future. 16 U.S.C. §§ 1532(6), (20); 1533(a)(1).<sup>1</sup> Once species are listed as threatened or endangered, the Services must designate their critical habitat, which is occupied or unoccupied habitat that contains physical or biological features essential to the conservation of the species and which may require special management considerations or protection. 16 U.S.C. §§ 1532(5), 1533(a)(3).

22. A federal agency that authorizes, funds, or carries out an activity that may affect a listed species must consult with the appropriate Service over the impacts of that activity to ensure that it does not jeopardize the continued existence of the species or result in the destruction or adverse modification of critical habitat. 16 U.S.C. § 1536(a)(2). Jeopardize means to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of the species in the wild by

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<sup>1</sup> U.S. Fish and Wildlife Service is responsible for consultations involving terrestrial species, while National Marine Fisheries Service is responsible for consultations involving marine species, such as salmon and steelhead.



reducing the reproduction, numbers, or distribution of the species. 50 C.F.R. § 402.02.

23. During the ESA consultation process, if the action agency concludes in a “biological assessment” that the activity is “not likely to adversely affect” the listed species or adversely modify its critical habitat, and the Service concurs with that conclusion, then the consultation is complete. 50 C.F.R. §§ 402.12, 402.14(b). If, however, the action agency or the Service determine that the activity is “likely to adversely affect” the listed species or its critical habitat, then the Service completes a “biological opinion” to determine whether the activity will jeopardize the species or result in destruction or adverse modification of critical habitat. *Id.* § 402.14. If the Service determines in the biological opinion that the action will jeopardize the species or adversely modify critical habitat, it may propose one or more reasonable and prudent alternative actions that would avoid such results. 16 U.S.C. § 1536(b)(3)(A); 50 C.F.R. § 402.14(g)(5).

24. In addition to the substantive duty under ESA Section 7 to avoid jeopardizing a species or adversely modifying critical habitat, action agencies also have a duty, while the consultation process is occurring, to avoid making any irreversible or irretrievable commitment of resources with respect to the agency action which has the effect of foreclosing the formulation or implementation of any reasonable and prudent alternative measures that would avoid jeopardizing the species or adversely modifying critical habitat. 16 U.S.C. § 1536(d).

25. The ESA and its regulations also prohibit “take” of listed species, where take includes harassing, harming, wounding, or killing the species. 16 U.S.C. §§ 1538, 1532(19) (prohibiting take of endangered species); 50 C.F.R. § 223.203 (extending take prohibition to threatened West Coast salmon and steelhead). Harm is further defined to include significant habitat modification or degradation that kills or injures a listed species by significantly impairing

essential behavioral patterns, including breeding, rearing, migrating, feeding, or sheltering. 50 C.F.R. § 17.3. NMFS allows take of threatened West Coast salmon and steelhead in certain circumstances, including take related to impacts from hatcheries where NMFS has approved a Hatchery and Genetic Management Plan (“HGMP”). 50 C.F.R. § 223.203.

26. The Services can also authorize take of a listed species through an “Incidental Take Statement” that accompanies a biological opinion if the taking is incidental to an otherwise lawful activity and does not cause jeopardy to the species. 16 U.S.C. § 1536(b)(4); 50 C.F.R. § 402.14(i). Any taking that conforms to the terms and conditions within an Incidental Take Statement is not prohibited under Section 9 of the ESA. 16 U.S.C. § 1536 (o)(2); 50 C.F.R. § 402.14(i)(5).

27. Once the consultation is complete, the agencies have a duty to insure that it remains valid. Reinitiation of consultation is required and shall be requested by the action agency or the Services if: (a) the amount or extent of taking specified in the incidental take statement is exceeded; (b) new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered; (c) the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the biological opinion; or (d) a new species is listed or critical habitat designated that may be affected by the identified action. 50 C.F.R. § 402.16.

#### Administrative Procedure Act

28. The Administrative Procedure Act confers a right of judicial review on any person that is adversely affected by a federal agency action. 5 U.S.C. § 702. Upon review, the court shall “hold unlawful and set aside agency actions . . . found to be arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.” *Id.* § 706(2)(A). The APA defines

“agency action” to include a “failure to act.” *Id.* §§ 551(13), 701(b)(2). A reviewing court also shall “compel agency action unlawfully withheld or unreasonably delayed.” *Id.* § 706(1).

## **STATEMENT OF FACTS**

### Upper Willamette River Chinook Salmon and Steelhead

29. Upper Willamette River Chinook salmon and steelhead are the only two anadromous salmonids native to the Upper Willamette River above Willamette Falls. Each species is listed as threatened under the ESA, and each has designated critical habitat in the Upper Willamette River basin. These anadromous species are born in freshwater streams in the Upper Willamette River basin and then migrate down the Willamette River and Columbia River to the ocean, where they live for several years before returning to their natal streams to spawn. They adapted to the natural flows in the Willamette River by returning from the ocean and entering the river in late winter and getting past Willamette Falls in spring when flows were high enough for the fish to ascend the falls. Due to changes in water flows caused by dams, the fish now ascend Willamette Falls through a fish ladder.

30. There are seven geographically distinct populations of Upper Willamette River Chinook salmon: Clackamas, Molalla, North Santiam, South Santiam, Calapooia, McKenzie, and Middle Fork Willamette. NMFS considers the Middle Fork population a core population that is critical to the long-term persistence of Upper Willamette River Chinook salmon, but there are very few wild fish left in this population. These seven river basins also contain critical habitat for Upper Willamette River Chinook. The Upper Willamette River Chinook populations make up one of the most genetically distinct groups of Chinook salmon in the Columbia River Basin.

31. Upper Willamette River Chinook begin appearing in the lower Willamette River in February and most of the run ascends the falls from April through July. Spawning occurs in

September and early October and eggs incubate in gravels until the following spring. Juveniles emigrate to the ocean either as sub-yearlings in the fall or as yearlings in the spring.

32. Historically, the Upper Willamette River supported hundreds of thousands of Chinook salmon, but populations have declined dramatically and about 80% of Upper Willamette River Chinook salmon are now hatchery fish. In 2016, only 11,600 wild Upper Willamette River Chinook entered the mouth of the Columbia River, with less than 7,000 counted at Willamette Falls and 3,600 entering the Clackamas River below the falls.<sup>2</sup> Counts of wild Upper Willamette River Chinook have averaged less than 10,000 fish at Willamette Falls since 2010. NMFS considers Upper Willamette River Chinook salmon to be at high risk of extinction, with five of the seven local populations at very high risk of extinction.

33. Upper Willamette River steelhead consists of four geographically distinct populations: Molalla, Calapooia, North Santiam, and South Santiam. Designated critical habitat occurs in each of these sub-basins. Upper Willamette River steelhead do not occupy the Middle Fork Willamette or McKenzie sub-basins. These steelhead are winter run steelhead, returning from the ocean and entering the Willamette River starting in November, with the bulk of the run moving past Willamette Falls from December through April. They spawn from March to early June, and eggs incubate in gravels through the summer. Juvenile steelhead rear in freshwater for one to three years before migrating down the Willamette and Columbia Rivers to the ocean March through June.

34. Upper Willamette River winter steelhead consist of only wild fish—no hatchery fish currently occur in this run of steelhead. Out-of-basin hatchery summer steelhead are introduced into the Upper Willamette for recreational fishing but they are not considered part of

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<sup>2</sup> 2017 figures for wild Upper Willamette River Chinook are not yet available.

Upper Willamette River steelhead and in fact harm the native threatened winter steelhead.

35. Like Upper Willamette River Chinook, Upper Willamette River steelhead have significantly declined in numbers compared to historic levels, and plummeted further in 2017. The number of Upper Willamette River steelhead passing Willamette Falls averaged about 5,600 fish over the past ten years. In 2017, just 822 Upper Willamette River steelhead made it past Willamette Falls. Since 2009, each of the local populations has dropped dramatically in average annual run size, with the North Santiam population dropping 35%, the South Santiam population dropping 55%, the Mollala population dropping 28%, and the Calapooia population dropping 53% compared to pre-2009 annual run sizes.

#### Willamette River Basin Flood Control Project

36. The Willamette Project consists of thirteen dams on tributaries of the Willamette River, 42 miles of revetments along the banks of the Willamette River and its tributaries, and five hatcheries that produce salmon and steelhead to mitigate for the impacts of the dams. The principal purpose of the dams is flood control, but they also are authorized for power generation, storage for irrigation water, recreation, and fish and wildlife. Several of the dams are “high head” dams, meaning they are very tall and have a large drop from the reservoir level behind the dam to the river level below the dam. The reservoirs behind many of these dams are miles long, acting like large lakes with little water flow. Some reservoirs, such as Detroit reservoir, are popular recreation areas.

37. The Corps operates these dams by varying the amount of water that flows through or past the dams. Some of the water goes through turbines that generate power (eight of the dams produce power), some of the water goes through regulating outlets that pass water through the dams without generating power, and some of the water is spilled over the top of the dams.

The Corps develops seasonal water management plans based on seasonal forecasts and hydrologic models, and is responsible for daily decisions regarding regulation of water flow and storage at the dams.

38. Willamette Project dams are the most significant factor in the decline of Upper Willamette River Chinook salmon and steelhead, with the largest impacts occurring from dams in four sub-basins: Middle Fork Willamette sub-basin (Dexter, Lookout Point, Fall Creek, Hills Creek dams), McKenzie sub-basin (Cougar, Blue River dams), North Santiam sub-basin (Big Cliff, Detroit dams), and South Santiam sub-basin (Foster, Green Peter dams).

39. When adult salmonids return from the ocean to complete their life cycle by spawning in their natal streams, these dams physically block the fish from reaching most of their historic spawning grounds. None of the dams have upstream passage facilities—like fish ladders—that would allow adults to migrate past the dams of their own volition. Currently, the only way adult fish can move past the dams is to trap and haul them upstream in a truck, which can stress, injure, and kill fish.

40. For Upper Willamette River Chinook salmon, dams cut off more than 90% of the historic spawning habitat in the Middle Fork Willamette sub-basin, and about 70% of historic spawning habitat in the North and South Santiam sub-basins. The McKenzie sub-basin has more spawning habitat lower in the watershed, with just 16% of spawning habitat blocked by Willamette Project dams. For Upper Willamette River steelhead, about 33% of historic spawning habitat is blocked by Project dams. Much of this historical spawning habitat is high quality habitat within National Forest lands. Adult fish stuck below dams face high pre-spawn mortality rates or are forced to spawn in unsuitable areas with poor water quality.

41. In addition to blocking access to upstream habitat, the presence and operation of

the dams causes numerous problems for downstream fish habitat. The dams alter natural water flows of the rivers by storing water in reservoirs and releasing it in quantities that are often lower or higher than natural levels; they alter instream water temperatures and dissolved gas levels; and they block peak flows, sediment, and large woody debris. All of these results adversely affect Upper Willamette River salmon and steelhead by creating water flows below dams that adversely affect spawning and rearing, causing water temperatures and dissolved gas levels outside of the optimum range for these fish, and eliminating or reducing necessary attributes for high quality fish habitat.

42. The reservoirs behind the dams also adversely affect Upper Willamette River salmon and steelhead because the large bodies of stagnant water are difficult for juvenile salmon and steelhead to navigate when they migrate downriver, have poor water quality, and contain predatory fish that prey on the juveniles. Those juvenile fish that survive navigating the reservoirs then have high mortality once they reach the dams because the dams generally have no dedicated downstream passage facilities. Some juveniles can make it past the dams through turbines, regulating outlets, or spill, but these paths often cause death or injuries from turbine blades, drops of several hundred feet, and poor water conditions and habitat below the dams.

43. In an attempt to mitigate for the extensive impacts the Willamette Project has on Upper Willamette River Chinook salmon and steelhead, the Corps is required to fund five hatcheries run by Oregon Department of Fish and Wildlife. These hatcheries produce Chinook salmon for the North Santiam, South Santiam, McKenzie, and Middle Fork Willamette Rivers as well as out-of-basin summer steelhead for the North and South Santiam Rivers.

44. Introducing hatchery fish into these rivers is problematic for maintaining wild fish because hatchery fish can occupy limited spawning habitat and preclude wild fish from

reproducing, compete for resources with wild fish, interbreed with wild fish, and if wild fish are captured and incorporated into hatchery broodstock, they cannot spawn naturally. Because hatchery fish are less healthy, less resilient, and have lower survival than wild fish, diluting the gene pool of wild fish is deleterious for the species.

45. The Corps also is required to fund several trap and haul facilities, where adult salmon and steelhead are collected below the dams, transported by truck, and released above the dams to try and stimulate production of fish in historic spawning habitat. Even with outplanting of adult fish above the dams, high mortality of adults prior to spawning and even higher mortality of juveniles trying to migrate downstream past the dams have prevented much successful production above the dams.

#### ESA Consultation Over the Willamette Project

46. The Corps owns, operates, and maintains the dams and exercises general control over the Willamette Project as a whole. Two other federal agencies play a much more limited role in the Project: Bonneville Power Administration markets power generated at the dams, and the Bureau of Reclamation manages the contracts for irrigation storage water. These three agencies consulted with NMFS over the effects of the Willamette Project on ESA-listed salmon and steelhead species and their designated critical habitat. The three action agencies submitted a biological assessment to NMFS in 2000, but consultation efforts stalled. In 2007, NEDC was a plaintiff in a lawsuit against the Corps, NMFS, and other federal defendants that forced the agencies to complete consultation.

47. The Corps and the other action agencies submitted a supplemental biological assessment in 2007. Due to the far reaching impacts of the dams, the Action Area covered by the assessment consisted of the tributaries where the dams occur, the mainstem Willamette River,



and the Columbia River from its confluence with the Willamette River down to the ocean.

48. In the 2007 biological assessment, the Corps and the other action agencies proposed to continue operating and maintaining the Willamette Project in a manner that would largely maintain the status quo of degraded habitat and lack of passage for salmonids. The proposed action in the biological assessment did include some measures that addressed various components, such as: (1) flows in the mainstem Willamette River and key tributaries; (2) hatchery facilities; (3) adult fish collection and outplant program and facilities; (4) habitat restoration; (5) irrigation storage; (6) water temperature and dissolved gas levels; (7) downstream fish passage; (8) research and monitoring; and (9) coordination with NMFS and ODFW on management of the dams and hatcheries. However, the Corps retained discretion to change some measures or to decide not to comply with them, few measures had deadlines for implementation, and many of the measures—including for downstream fish passage—were simply requirements to do more studies rather than actual changes to operations.

49. NMFS completed the consultation by issuing a biological opinion in 2008. The opinion was intended to last until 2023, but could be extended upon request by the action agencies and approval by NMFS. NMFS determined in the 2008 biological opinion that the Corps' proposed action was likely to jeopardize Upper Willamette River Chinook salmon and steelhead and adversely modify their critical habitat because the operation of the Project would continue to cause significant adverse effects to the species and their habitat. The proposed action had few mitigation measures that were certain to occur for improving downstream fish passage, water temperatures, dissolved gas levels, habitat quality below dams, hatchery practices, and compliance with flow objectives.

50. NMFS concluded that the proposed action was not sufficient to avoid jeopardy to

both species and adverse modification of their critical habitat because it lacked specific on-the-ground measures that were certain to occur within a definite timeframe. Instead, NMFS stated that continued impacts to the fish and degradation of habitat would cause further decline of the species and put them at even higher risk of extinction.

51. The biological opinion then set forth a Reasonable and Prudent Alternative that would allow continued operation of the Willamette Project in a way that would avoid jeopardy to the species and adverse modification of critical habitat. The Reasonable and Prudent Alternative added mitigation measures for flow management, water quality (particularly water temperature and dissolved gas levels), fish passage, irrigation contracts, hatcheries, habitat, and research and monitoring. Many of these measures had deadlines for completion. Some measures were to be implemented in the first seven years of the biological opinion to improve population viability and reduce short-term risk of extinction. Longer-term measures were to be completed in the second half of the fifteen-year term and would contribute significantly to both species' survival and potential for recovery.

52. Measures to be completed in the first seven years (2008-2015) included monitoring and managing water flows to meet minimum and maximum flow objectives, operational changes to improve water temperatures and dissolved gas levels, emergency plans to reduce impacts to the fish during maintenance projects or unplanned outages at turbines or hatcheries, updating hatchery operations and facilities and implementing Hatchery and Genetic Management Plans (HGMPs), upgrading adult fish collection facilities and outplanting procedures, operational changes to improve downstream fish migration, completing habitat restoration projects, and conducting numerous studies related to impacts of the Project. Longer-term measures to be completed by 2023 included constructing significant downstream fish

passage facilities at three dams, and significant structural or operational changes for temperature control at one dam. Most of these measures had deadlines for implementation.

53. Fish passage was a critical component of the Reasonable and Prudent Alternative. The biological opinion stated that lack of passage is one of the most significant adverse effects to the species, and both operational and structural changes to improve passage were necessary components of the Reasonable and Prudent Alternative to address the effects of the Project. The Reasonable and Prudent Alternative set forth timelines for planning and completing various actions to improve upstream and downstream passage. These actions included implementing major structural changes to improve downstream passage at Cougar Dam, Lookout Point Dam, and Detroit Dam by the end of the biological opinion term. This Reasonable and Prudent Alternative requirement was a high priority measure designed to “ensure” that downstream passage would happen at three dams in the next fifteen years. In the meantime, the Corps was required to make interim operational changes to improve downstream migration at multiple dams, such as adjusting water flows to improve migration through reservoirs and survival getting past dams. Passage measures also called for rebuilding adult collection facilities by set deadlines to improve upstream passage at four dams.

54. Another key component of the Reasonable and Prudent Alternative addressed water quality, in particular water temperatures and total dissolved gas levels. The biological opinion stated that water quality problems were one of the major limiting factors in habitat below the dams, and the Reasonable and Prudent Alternative included both short-term and long-term measures to address these problems. The Reasonable and Prudent Alternative explained that the Corps needed to implement short-term measures as soon as possible given the low abundance of Chinook populations and high risk of extinction. For long-term improvement, the Corps must

construct a temperature control facility at one dam by the end of 2018, with Detroit Dam being first priority.

55. To assist with the planning of downstream passage, temperature control, and other significant structural or operational changes, the Reasonable and Prudent Alternative required the Corps to conduct a multi-year study with timelines for key decision points. The study was to be completed by 2012, in line with the timing for planning and implementation deadlines related to downstream fish passage and temperature control. The Reasonable and Prudent Alternative stated that if the study determined these key actions were not feasible, the Corps must come up with other alternatives or reinitiate consultation.

56. The biological opinion stated that implementation of the Reasonable and Prudent Alternative was expected to significantly improve the status of the species by addressing key limiting factors. In particular, it noted that short-term and long-term actions would improve adult and juvenile fish passage, water temperatures, and flows downstream of dams, which would allow Chinook and steelhead to increase in numbers, productivity, distribution, and genetic diversity during the fifteen-year biological opinion term and beyond. The biological opinion's conclusion that the Reasonable and Prudent Alternative would avoid jeopardy to the species and adverse modification of critical habitat was based on the assumption that the Corps would successfully and timely complete the Reasonable and Prudent Alternative measures.

57. The final section of the biological opinion contained an Incidental Take Statement that specified the amount or extent of incidental take that NMFS authorized for operation of the Willamette Project. The Incidental Take Statement included Reasonable and Prudent Measures and Terms and Conditions to minimize the Project's adverse effects. One of the requirements was that the Corps had to complete all mandatory monitoring and reporting identified in the

biological opinion.

58. The Incidental Take Statement did not authorize take of Upper Willamette River Chinook salmon that occurred due to the Chinook hatchery programs at Marion Forks, South Santiam, McKenzie, and Willamette hatcheries. Instead, the Incidental Take Statement asserted that authorization of incidental and direct take of Upper Willamette River Chinook due to the Chinook hatcheries would occur through the HGMP process.

#### The Corps' Failure to Implement the Biological Opinion Since 2008

59. Since 2008, the Corps has failed to implement key mitigation actions in the Reasonable and Prudent Alternative and has delayed implementation of other actions well past their deadlines. The result is that the Willamette Project has inflicted more harm upon Upper Willamette River Chinook and steelhead and caused more degradation of habitat compared to what the biological opinion expected would occur. The Corps is the agency with the authority and responsibility to implement the Reasonable and Prudent Alternative measures at issue.

60. Fish passage was one of the most important elements in the Reasonable and Prudent Alternative but the Corps has made very slow progress toward implementing those measures. The Reasonable and Prudent Alternative called for a multi-year study to evaluate significant high-priority actions for fish passage and temperature control and provide recommendations by 2012 on which actions to implement. The Reasonable and Prudent Alternative set forth deadlines for completion of downstream passage facilities at three dams: Cougar (2015), Lookout Point (2022), and Detroit (2024); and required interim operational measures to improve downstream passage at multiple dams until the new structural facilities could be built. It also imposed deadlines for actions that would improve upstream adult passage. The Corps is far behind schedule in its implementation of this key component of the Reasonable

and Prudent Alternative

61. The Corps did not issue its recommendations from its multi-year study until 2015—three years behind schedule—and it did not include any recommendations for downstream fish passage facilities at Lookout Point Dam. The Corps does not expect to complete passage facilities at Cougar Dam until 2022 at the earliest. The Corps has begun planning for Detroit Dam downstream passage but does not expect to complete construction of facilities until at least 2028. And the Corps has no current plan to construct fish passage facilities at Lookout Point Dam.

62. According to a 2017 report, the Corps also has not implemented interim operational measures to improve downstream migration at Big Cliff, Green Peter, Blue River, Cougar, Hills Creek, Lookout Point, and Dexter Dams. The Corps has no plans to improve fish collection facilities for upstream adult passage around Dexter Dam, which had a construction deadline of December 2014. In sum, the Corps has failed to implement most of the measures aimed at improving fish passage, including all Reasonable and Prudent Alternative measures intended to improve upstream or downstream passage for Upper Willamette River Chinook in the Middle Fork Willamette River.

63. The Corps failed to construct and evaluate a prototype “head-of-reservoir” juvenile collection facility above either Lookout Point or Foster Dams, as required by the Reasonable and Prudent Alternative. Instead, the Corps chose to construct a prototype juvenile collection system right behind Cougar Dam, which has had limited success collecting juvenile Chinook salmon for passage around the dam. Finally, the Corps did not complete all required studies and analyses to assess downstream migration through reservoirs and past dams by the deadlines imposed in the Reasonable and Prudent Alternative.

64. The 2017 report showed that the Corps has failed to implement interim measures to address water temperatures and/or dissolved gas levels at Green Peter, Foster, Big Cliff, Dexter, Lookout Point, or Hills Creek Dams. The Reasonable and Prudent Alternative identified Lookout Point and Hills Creek Dams as priorities for such measures. The Corps also will exceed the deadline by more than four years for construction and operation of a temperature control structure at Detroit Dam for long-term improvement to water temperature in the North Santiam River.

65. The Corps has not followed proper procedures during planned maintenance or unplanned events, such as turbine outages or equipment failures at hatcheries, to reduce impacts to Upper Willamette River Chinook and steelhead. Failure to adequately follow protocols during these events has led to greater than expected impacts from high total dissolved gas levels or changes to water temperature in some instances.

66. The Reasonable and Prudent Alternative set minimum and maximum water flow objectives for the mainstem Willamette River near Albany and Salem, and also for tributaries North Santiam, South Santiam, McKenzie, Middle Fork Willamette, and Fall Creek. The Corps has failed meet the flow objectives on a consistent basis.

67. For hatchery improvements, the Reasonable and Prudent Alternative relied heavily on imminent implementation of HGMPs, but almost ten years later NMFS has not approved any HGMPs. The Corps has declined to implement any beneficial measures from the HGMPs until they are approved. The Corps has not fulfilled other Reasonable and Prudent Alternative measures aimed at reducing hatchery impacts, including: (1) limiting straying of hatchery fish into wild fish spawning habitat so that hatchery fish make up <10% of the total spawning population in the McKenzie River; and (2) limiting outplanting of adult hatchery

Chinook above Cougar Dam to 50% or less of all outplanted fish.

68. The Corps did not complete the critical Willamette Fish Operations Plan, a document that contains operating criteria, protocols, and plans necessary to implement many of the Reasonable and Prudent Alternative measures, until November 2014—six years past the October 2008 deadline for completion. Nor has the Corps completed all research and monitoring required by the biological opinion.

69. Finally, the Reasonable and Prudent Alternative contained various measures that required notifying NMFS or receiving approval from NMFS in certain circumstances, which the Corps has sometimes ignored. For example, the Corps recently decided to eliminate funding for required hatchery baseline monitoring and evaluation without consulting NMFS, and it has often failed to immediately notify NMFS and coordinate a remedy when unplanned outages occurred at dams or hatcheries.

70. The Corps' delays and failure to implement crucial Reasonable and Prudent Alternative measures—particularly those designed to address upstream and downstream fish passage and harmful water temperatures and dissolved gas levels—means Upper Willamette River Chinook and steelhead have not and will not receive the benefits that NMFS assumed would occur from successful implementation of the Reasonable and Prudent Alternative over the biological opinion's fifteen-year term. NMFS's assumption that the Corps would complete these measures during the biological opinion term, which would improve the status of the species, formed the basis of NMFS's no-jeopardy and no-adverse modification of critical habitat conclusions.

71. Because these assumptions have not been met, significant harm has occurred and will continue to occur to these species for years due to lack of access to historic habitat above the



dams as well as degraded habitat below the dams. Such harm is greater and longer lasting than NMFS considered and relied on in the biological opinion, and therefore the Corps and NMFS must reinitiate consultation. A new consultation is needed to determine under these changed circumstances what interim and long-term measures must be taken at this point to prevent jeopardy to the species and adverse modification of their critical habitat.

#### New Information Since 2008

72. The latest status review and fish counts show that Upper Willamette River Chinook salmon and steelhead are at even higher risk of extinction than they were in 2008. NMFS expected that these species would increase in abundance, productivity, spatial distribution, and genetic diversity during the biological opinion's fifteen-year term. Instead, these species are at even lower abundance, have not increased in productivity or spatial distribution because there has been little success with reproduction upstream of dams, and have not increased in genetic diversity.

73. Although the Clackamas population of Upper Willamette River Chinook has seen a slight improvement, the McKenzie population—which had been considered a stronghold population—has declined in recent years and the other five populations remain at very high risk of extinction. The 2015 status review by NMFS noted that absence of effective passage around dams in the four key tributaries to the Upper Willamette was still a significant limiting factor for Upper Willamette River Chinook salmon, and that long-term climate change effects combined with the inability of these populations to access historic headwater habitat may put the species at even greater risk of extinction in the near future. For example, in the summer of 2015 extended drought conditions and high summer temperatures caused abnormally high water temperatures in the Willamette River and dewatering of tributaries, which led to a severe fish kill for Chinook.

74. Research conducted since 2008 shows even higher mortality of pre-spawn adult Upper Willamette River Chinook than what scientists had believed was occurring. Studies published in 2016 and 2017 show high rates of mortality for adult Upper Willamette River Chinook during migration in the mainstem Willamette and also after they reach tributaries but before they spawn. Mainstem mortality rates of Upper Willamette River Chinook were higher than for spring Chinook populations in other river systems, with 10-21% of adults dying before they reach tributaries. Pre-spawn mortality of adult Upper Willamette River Chinook in tributaries was also high and largely caused by high water temperatures and poor fish conditions.

75. Upper Willamette River steelhead are in an even more dire situation. Each of the Upper Willamette River steelhead populations has been on a decade-long downward trend, and just 822 of the fish made it past Willamette Falls in 2017. Poor ocean conditions over the last several years contributed to the lowest return of winter steelhead on record, and sea lion predation at the base of Willamette Falls also took a large toll. Oregon Department of Fish and Wildlife has declared that if sea lion predation continues at levels similar to 2017, there is a very high probability that at least one population of Upper Willamette River steelhead will go extinct within the foreseeable future.

76. Sea lion predation at Willamette Falls has steadily increased since NMFS issued the 2008 biological opinion. While only a few sea lions appeared at the falls prior to 2009, that number has increased over the last ten years and 40 sea lions were documented at the falls in 2017, eating 20-25% of the Upper Willamette River winter steelhead run. Sea lions will also prey upon Upper Willamette River Chinook.

77. Other information arising since 2008 includes studies showing that trap-and-haul methods of fish passage for adult salmon and steelhead are not as effective as the biological

opinion assumed; stray rates of hatchery fish are higher than previously believed; and new diseases are occurring at hatcheries.

78. This new information, combined with the changed circumstances stemming from the Corps' noncompliance with the Reasonable and Prudent Alternative, requires reinitiation of consultation to assess the significantly greater effects to Upper Willamette River Chinook salmon and steelhead occurring from continued operation of the Willamette Project than what the existing biological opinion considered and relied upon for its conclusions.

79. Instead, the Corps has simply continued its operation of the Willamette Project in largely the same manner as the original proposed action, which NMFS determined was likely to cause jeopardy to the fish and adverse modification of critical habitat. The Corps continues to operate the Willamette Project without successfully completing actions under the deadlines laid out in the Reasonable and Prudent Alternative to address key problems of fish passage, water quality, downstream habitat conditions, and hatcheries. As a result, the Corps cannot ensure that its actions are not likely to jeopardize Upper Willamette River Chinook salmon and steelhead or adversely modify their critical habitat, as required by the ESA.

80. The Corps also continues to fund Willamette Project Chinook salmon hatcheries without having any incidental take coverage, which continues to cause or contribute to unlawful take of Upper Willamette River Chinook. In addition, the failure to comply with all Terms and Conditions in the Incidental Take Statement means the Corps is not exempt from the ESA's prohibition on take and is causing unlawful take of Upper Willamette River Chinook and steelhead by operating the Willamette Project in ways that kill, harm, and harass the fish.

**FIRST CLAIM FOR RELIEF**  
**THE ARMY CORPS OF ENGINEERS' VIOLATIONS OF THE ESA**

81. Plaintiffs reallege and incorporate by reference the preceding paragraphs.

82. This first claim for relief challenges the Corps' violations of the ESA by failing to reinitiate consultation over the Willamette Project and continuing to operate and maintain the Willamette Project in ways that jeopardize and take Upper Willamette River salmon and steelhead and adversely modify their critical habitat. Plaintiffs bring this claim pursuant to the citizen suit provision of the ESA, 16 U.S.C. § 1540(g).

83. The Corps previously consulted with NMFS over its ownership, operation, and maintenance of the Willamette Project, and it retains ownership and discretionary control over the Project. An action agency must reinitiate consultation whenever new information reveals effects of the action that may affect the species or its critical habitat in a manner or to an extent not previously considered, or if the action is modified in a manner that causes an effect to the species or its critical habitat in a way not considered in the consultation. 50 C.F.R. § 402.16.

84. The Corps has a duty to reinitiate consultation over the Willamette Project for two main reasons. First, the agency has failed to implement, or has significantly delayed implementing, many of the conservation measures from the Reasonable and Prudent Alternative; this has caused the Willamette Project to have significantly more adverse effects to Upper Willamette River Chinook salmon and steelhead and their critical habitat than was expected in the 2008 biological opinion. Second, new information about the poor status of the species, effects of climate change, increased sea lion predation at Willamette Falls, high pre-spawn mortality of adult salmon in the Willamette River and its tributaries, and problems related to hatcheries affect the species and their critical habitat in a manner or to an extent not considered in the 2008 biological opinion. By failing to reinitiate consultation with NMFS over the Willamette Project, the Corps is in violation of the ESA. 50 C.F.R. § 402.16.

85. The Corps' failure to implement many Reasonable and Prudent Alternative

measures, particularly key measures to improve fish passage, water temperatures and dissolved gas levels, is resulting in continued jeopardy to Upper Willamette River Chinook salmon and steelhead and adverse modification of their critical habitat. These species still have poor production below replacement levels, and their continued existence is at risk with no progress toward recovery. By continuing to operate and maintain the Willamette Project in ways that jeopardize the species and adversely modify their critical habitat, the Corps is violating ESA Section 7(a)(2). 16 U.S.C. § 1536(a)(2).

86. The Corps also is contributing to unlawful “take” of Upper Willamette River Chinook salmon and steelhead because the operation of the Willamette Project continues to kill, harm, and harass the fish. First, the Corps is liable for take of Upper Willamette River Chinook salmon caused by harm from Chinook salmon hatcheries that the Corps funds due to a lack of authorization for incidental or direct take at hatcheries. The 2008 biological opinion stated that such take would be authorized through NMFS-approved HGMPs, but NMFS has yet to approve HGMPs for the Willamette Project hatcheries and thus the Corps is liable for unauthorized take occurring at those hatcheries.

87. Second, the Corps has not complied with all Terms and Conditions in the Incidental Take Statement, particularly terms requiring completion of all mandatory monitoring and reporting identified in the 2008 biological opinion. Failure to comply with all Terms and Conditions in the Incidental Take Statement means the Corps is liable for take caused by the Willamette Project. By causing or contributing to take of Upper Willamette River Chinook salmon and steelhead that is not authorized by NMFS, the Corps is violating ESA Section 9. 16 U.S.C. § 1538.

88. If the Corps and NMFS reinitiate consultation, the Corps must prevent any

irreversible or irretrievable commitment of resources with respect to the agency action which has the effect of foreclosing the formulation or implementation of any reasonable and prudent alternative measures that would avoid jeopardizing the species or adversely modifying critical habitat. Operating and maintaining the Willamette Project in ways that cause such irreversible or irretrievable commitment of resources pending completion of a new consultation would violate ESA Section 7(d), 16 U.S.C. § 1536(d).

89. The Corps' violations of ESA Sections 7(a)(2), 7(d) and/or 9, and ESA regulation 50 C.F.R. § 402.16, are actionable pursuant to the ESA's citizen suit provision. 16 U.S.C. § 1540(g).

**SECOND CLAIM FOR RELIEF**  
**THE NATIONAL MARINE FISHERIES SERVICE'S VIOLATION OF THE APA**

90. Plaintiffs reallege and incorporate by reference the preceding paragraphs.

91. This second claim for relief challenges NMFS's refusal or failure to reinitiate ESA consultation with the Corps over the Willamette Project as required by ESA regulations, 50 C.F.R. § 402.16; and seeks judicial relief ordering NMFS to immediately reinitiate such consultation.

92. The Court has jurisdiction and authority to review this claim and provide relief to Plaintiffs pursuant to the APA, which directs that a "reviewing court shall—(1) compel agency action unlawfully withheld or unreasonably delayed." 5 U.S.C. § 706(1).

93. ESA regulations state that reinitiation of formal consultation is required and shall be requested by the Federal agency *or by the Service* if new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered, or the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not previously considered. 50 C.F.R. § 402.16.

NMFS was aware of the Corps' noncompliance with the Reasonable and Prudent Alternative and the relevant new information that has emerged since the 2008 biological opinion. Therefore, NMFS had a duty to reinitiate consultation with the Corps over the Willamette Project for the same reasons described above in the first claim for relief. *See supra* ¶ 84.

94. NMFS's refusal and failure to reinitiate consultation with the Corps over the Willamette Project represents agency action "unlawfully withheld or unreasonably delayed" under the APA, ESA regulations, and the facts presented, justifying the relief requested from the Court.

95. Accordingly, the Court shall compel such action under the APA, 5 U.S.C. § 706(1), and issue declaratory, injunctive, and/or other relief ordering NMFS to immediately reinitiate consultation with the Corps over the Willamette Project.

WHEREFORE, Plaintiffs pray for relief as set forth below.

#### **PRAYER FOR RELIEF**

A. Adjudge and declare that the Corps is violating ESA regulation 50 C.F.R. § 402.16 by failing to reinitiate consultation with NMFS over the Willamette Project;

B. Adjudge and declare that the Corps is violating its duty under ESA Section 7(a)(2) to ensure that its ownership, operation, and maintenance of the Willamette Project is not likely to jeopardize the continued existence of Upper Willamette River Chinook salmon and steelhead or adversely modify their critical habitat;

C. Adjudge and declare that the Corps is violating its duty under ESA Section 9 to avoid "take" of Upper Willamette River Chinook salmon and steelhead by continuing to fund, operate, and maintain the Willamette Project in a manner that causes or contributes to harm and harassment of Upper Willamette River Chinook salmon and steelhead without legal

authorization for that take;

D. Order the Corps to immediately reinstitute consultation with NMFS over the Willamette Project;

E. Adjudge and declare that NMFS's failure or refusal to reinstitute ESA consultation with the Corps over the Willamette Project constitutes agency action unlawfully withheld or unreasonably delayed under the APA;

F. Order NMFS to immediately reinstitute ESA consultation with the Corps over the Willamette Project;

G. Enter such other declaratory relief, and temporary, preliminary, or permanent injunctive relief as may be prayed for hereafter by Plaintiffs;

H. Award Plaintiffs their reasonable costs, litigation expenses, and attorneys' fees associated with this litigation pursuant to the ESA, 16 U.S.C. § 1540(g) and to the Equal Access to Justice Act, 28 U.S.C. § 2412 *et seq.*; and

I. Grant such further relief as the Court deems just and proper in order to provide Plaintiffs with relief and protect the public interest.

Dated: March 13, 2018

Respectfully submitted,

s/Lauren M. Rule

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